



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/building/

NOTICE OF ACCEPTANCE (NOA)

Tremco Inc.
3735 Green Road
Beachwood, OH 44122

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Tremco Modified Bitumen Roofing Systems Over Wood Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This renews NOA No. 11-0301.03 and consists of pages 1 through 29.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 11-0623.02
Expiration Date: 08/09/21
Approval Date: 07/28/16
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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Material: SBS
Deck Type: Wood
Maximum Design Pressure -77.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
BURmastic Adhesive	5 or 55 gallon	Proprietary	Cold applied ply sheet and surfacing adhesive.
BURmastic Adhesive SF	5 gallon	Proprietary	Cold applied ply sheet adhesive.
BURmastic Composite Ply	3' x 72'	ASTM D 4601 Type II	Asphalt coated, polyester/fiberglass reinforced base/ply sheet.
BURmastic Glass Ply	3' x 72'	ASTM D 4601 Type II	Asphalt coated, fiberglass reinforced base/ply sheet.
BURmastic Glass Ply 28 lb	3' x 108'	ASTM D 4601 Type II	Asphalt coated, fiberglass reinforced base/ply sheet.
Double Duty Aluminum	5 gallons	ASTM D 2824	Aluminum pigmented roof coating.
FAST-N-FREE	System	Proprietary	One part, solvent free insulation adhesive.
ICE Coating	5 and 55 gallons	Proprietary	High solids, water-based, elastomeric coating.
Alumanation 301	5 and 55 gallons	ASTM D 2824 Type III	Asphalt based, fibered aluminum roof coating.
PolyTHERM Roofing Ply	39 3/4" x 318'	Proprietary	Non-woven, heat resistant polyester ply sheet.
POWERply Standard FR	39 1/2" x 34.5'	ASTM D 6163	Fiberglass reinforced modified-bitumen membrane.
POWERply Premium FR	39 1/2" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Supreme FR	39 1/2" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Premium Smooth	39 1/2" x 51.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.



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POWERply Supreme Smooth	39 ½" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Standard Cold Adhesive	5 and 55 gallon containers	Proprietary	Cold applied ply sheet and membrane adhesive.
POWERply Modified Hot Melt Adhesive	60 lb. Keg	Proprietary	Polymer modified hot melt adhesive.
POWERply IV	5 sq./roll	ASTM D 2178 Type IV	Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built up roofing.
POWERply VI	5 sq./roll	ASTM D 2178 Type VI	Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built up roofing.
Premium III	100 lb. keg	ASTM D 312	Premium grade Type III asphalt.
Premium IV	100 lb. keg	ASTM D 312	Premium grade Type IV asphalt.
THERMastic 80	60 lb. Containers	Proprietary	Polymer modified hot melt adhesive.
THERMglass Type IV	3' x 180'	ASTM D 2178 Type IV	Type IV asphalt impregnated glass felt.
THERMglass Premium VI	3' x 180'	ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt.
TremLastic S Adhesive	5 or 55gallon	Proprietary	Non-fibered, polymer modified asphalt emulsion.
TREMprime Q.D. primer	1,5 or 55 gallon containers	ASTM D 41	Asphalt based roofing primer.
TREMprime WB	5 gallon container	Proprietary	Water based roofing primer.

APPROVED INSULATIONS:**TABLE 2**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
ACFoam-II	Various	TAS 110	Polyisocyanurate foam insulation	Atlas Roofing Corporation
High Density Wood Fiberboard	Various	TAS 110	Wood fiber insulation board	Generic
Perlite Insulation Board	Various	TAS 110	Perlite insulation board	Generic
ENRGY 3	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville Corp.
ENRGY 3 Plus	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville Corp.
FescoBoard	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville Corp.
Ultra-Max	Various	TAS 110	Polyisocyanurate foam insulation	Rmax Operating, LLC
Multi-Max FA-3	Various	TAS 110	Polyisocyanurate foam insulation	Rmax Operating, LLC
DensDeck	Various	TAS 110	Water resistant gypsum board	Georgia Pacific Gypsum LLC

APPROVED FASTENERS:**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast 12	Insulation fastener for steel and wood	Various	SFS Intec, Inc.
2.	Dekfast 14	Insulation fastener for steel, wood and concrete	Various	SFS Intec, Inc.
3.	Dekfast 15 HS	Insulation fastener for steel, wood and concrete	Various	SFS Intec, Inc.
4.	#12 Standard Roofgrip	Insulation fastener for steel and wood	Various	OMG, Inc.
5.	#14 Roofgrip	Insulation fastener for steel, wood and concrete	Various	OMG, Inc.
6.	#15 Roofgrip	Insulation fastener for steel, wood and concrete	Various	OMG, Inc.
7.	Dekfast Galvalume Steel 3" Round	Carbon steel, Sentri (black)	3" round	SFS Intec, Inc.
8.	3 in. Round Metal Plate	Galvalume AZ50 stress plate.	3" round	OMG, Inc.
9.	Trufast #12 DP Fastener	Insulation fastener for steel and wood	Various	Altenloh, Brinck & Co. U.S., Inc.
10.	Trufast #14 HD Fastener	Insulation fastener for steel, wood and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
11.	Trufast #15 EHD Fastener	Insulation fastener for steel, wood and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
12.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 stress plate.	3" round	Altenloh, Brinck & Co. U.S., Inc.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Factory Mutual Research Corporation	1994 FM	Current Insulation Fastening Requirements	01/01/94
	2Y9A5.AM	FM 4470	11/13/95
	2D1A8.AM	FM 4470	07/27/2000
	0D0A9.AM	FM 4470	08/01/2000
PRI Asphalt Technologies, Inc.	TRE-15-02-01	Physical Properties	05/25/99
Underwriters Laboratories, Inc.	R6692	Fire Classification Compliance	01/01/94
Momentum Technologies, Inc.	DX12K5A	ASTM D 6163	11/07/05
	CX13K5A	ASTM D 6162	11/07/05
	DX11K5A	ASTM D 6164	11/07/05

APPROVED ASSEMBLIES:

Membrane Type:	SBS
Deck Type II:	Wood, Insulated
Deck Description:	1 ⁹ / ₃₂ " or greater plywood or wood plank
System Type A(1):	Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board Minimum 1" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board Minimum 1" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in THERMastic 80 at 2.5 gal./sq. or in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Anchor Sheet:	One ply of BURMastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb mechanically fastened to the deck as detailed below.
Fastening:	Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.
Base Sheet:	(Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. ± 15%.
Ply Sheet:	(Optional) Two plies of THERMglass Type IV adhered to the insulated substrate with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq. ± 15%.
Cap Sheet:	(Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.
Surfacing:	Use one of the following surfacing: <ol style="list-style-type: none">1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM D312 asphalt at an application rate of 60 lb./sq. ± 15%2. A coat of Double Duty Aluminum at 1 gal./sq.
Maximum Design Pressure:	-45 psf. (See General Limitation #9.)

Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank
System Type A(2): Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Ultra-Max Minimum 1.5" thick	N/A	N/A

Note: Base layers of insulation shall be bonded to anchor sheet with $\frac{1}{2}$ " ribbons of FAS-N-FREE adhesive applied at 1.5 gal./sq. for perlite insulation board and polyisocyanurate.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board Minimum 1" thick	N/A	N/A

Note: Top layer of insulation shall be bonded with $\frac{1}{2}$ " ribbons of FAS-N-FREE adhesive applied at 1.5 gal./sq. for perlite insulation board and polyisocyanurate.

Anchor Sheet: One ply of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb mechanically fastened to the deck as detailed below.

Fastening: Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.

Base Sheet: (Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15%.

Ply Sheet: (Optional) Two plies of THERMglass Type IV adhered to the insulated substrate with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq. \pm 15%.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.



Surfacing:

Use one of the following surfacing:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM D312 asphalt at an application rate of 60 lb./sq. \pm 15%
2. A coat of Double Duty Aluminum at 1 gal./sq.

**Maximum Design
Pressure:**

-45 psf. (See General Limitation #9.)

Membrane Type:	SBS
Deck Type II:	Wood, Insulated
Deck Description:	1 ⁹ / ₃₂ " or greater plywood or wood plank
System Type A(3):	Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density ft²</u>
ENRGY 3, ACFoam-II, Ultra-Max, Multi-Max FA-3, ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density ft²</u>
ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum: ½" thick	N/A	N/A
DensDeck Minimum: ¼" thick	N/A	N/A

Note: Optional insulation shall be adhered to the anchor sheet in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or 2.0 gallons per square for polyisocyanurate insulation. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Anchor Sheet:	One ply of BURmastic Composite Ply mechanically attached to the wood deck using 11 ga. annular ring shank nails and 1- ⁵ / ₈ " tin caps spaced 6" o.c. in the lap and two rows staggered in the center of the sheet, 9" o.c.
Base Sheet:	(Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.
Ply Sheet:	Two or three plies of THERMglass Type IV or PolyTHERM Roofing ply sheet adhered to insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 30 to 35 lb/sq for each ply. (See specification number for appropriate number of plies).
Cap Sheet:	POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal.per 100 sq.ft.



Surfacing:

(Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq.
2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively.

**Maximum Design
Pressure:**

-77.5 psf; (See General Limitation #9.)

Membrane Type:	SBS
Deck Type II:	Wood, Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank
System Type A(4):	Anchor sheet mechanically fastened; one or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
ENRGY 3, ACFoam-II, Ultra-Max, Multi-Max FA-3, ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum: ½" thick	N/A	N/A
DensDeck Minimum: ¼" thick	N/A	N/A

Note: Optional insulation shall be adhered to the anchor sheet in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or 2.0 gallons per square for polyisocyanurate insulation. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Anchor Sheet:	One ply of BURmastic Composite Ply mechanically attached to the wood deck using 11 ga. annular ring shank nails and 1- ⁵ / ₈ " tin caps spaced 6" o.c. in the lap and two rows staggered in the center of the sheet, 9" o.c.
Base Sheet:	(Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.
Ply Sheet:	Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF



Capsheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal.per 100 sq.ft.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following: Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone.
2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 $\frac{1}{5}$ gal./sq. and 400 lbs./sq., respectively.

Maximum Design Pressure: -77.5 psf; (See General Limitation #9.)

Membrane Type:	SBS
Deck Type II:	Wood, Insulated
Deck Description:	$1\frac{9}{32}$ " or greater plywood or wood plank
System Type B(1):	Base layer of insulation mechanically fastened, top layer of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Ultra-Max Minimum 1.5" thick	1, 4	1:2 ft ²

Note: Fastener density assumes compliance with Roofing Application Standard RAS 117; field withdrawal resistance testing shall be carried out in accordance with TAS 105 to confirm compliance (see limitations). See Roofing Application Standard RAS 117 for fastener details.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board Minimum 1" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any mopping asphalt at an application rate, for the appropriate slope, of 25 lbs./sq. \pm 15%. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet:	(Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15%.
Ply Sheet:	(Optional) Two plies of THERMglass Type IV adhered to the insulated substrate with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq. \pm 15%.
Cap Sheet:	(Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.
Surfacing:	(Required if no cap sheet is used) Install one of the following: <ol style="list-style-type: none"> Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM D312 asphalt at an application rate of 60 lb./sq. \pm 15%. A coat of Double Duty Aluminum at 1 gal./sq.
Maximum Design Pressure:	-45 psf; (See General Limitation #7.)



Membrane Type:	SBS
Deck Type II:	Wood, Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank
System Type B(2):	Base layer of insulation mechanically fastened, top layer of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
ACFoam-II		
Minimum 1.3" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3		
Minimum 1.4" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3 Plus		
Minimum 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 4, 5, 6, 8	1:4 ft ² 1:3 ft ²
Ultra-Max		
Minimum 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2.9 ft ²
Perlite Insulation Board		
Minimum ³ / ₄ " thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastener details.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
High Density Wood Fiberboard		
Minimum ¹ / ₂ " thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gal./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.



Base Sheet:	(Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.
Ply Sheet:	Two or three plies of THERMglass IV or PolyTHERM Roofing Ply sheet adhered to insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 30 to 35 lb/sq for each ply. (See specification number for appropriate number of plies).
Cap Sheet:	POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.
Surfacing:	(Required if no cap sheet is used) Install one of the following: <ol style="list-style-type: none"> 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq. 2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively. 3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively
Maximum Design Pressure:	-45 psf. (See General Limitation #9.)

Membrane Type:	SBS
Deck Type 1I:	Wood, Insulated
Deck Description:	¹⁹ / ₃₂ " or greater plywood or wood plank
System Type B(3):	Base layer of insulation mechanically fastened, top layer of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density ft²</u>
ACFoam-II Minimum 1.3" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3 Minimum 1.4" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3 Plus Minimum 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 4, 5, 6, 8	1:4 ft ² 1:3 ft ²
Ultra-Max Minimum 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2.9 ft ²
Perlite Insulation Board Minimum ³/₄" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastener details.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density ft²</u>
High Density Wood Fiber Board Minimum ¹/₂" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gal./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.



- Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.
- Ply Sheet:** Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb sheet adhered in 3.5 gal./sq. \pm 15% of BURMastic adhesive or POWERply Standard Cold Adhesive (See specification number for appropriate number of plies).
- Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.**
- Capsheet:** POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.
- Surfacing:** (Required if no cap sheet is used) Install one of the following:
1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following: Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone.
 2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 $\frac{1}{5}$ gal./sq. and 400 lbs./sq., respectively.
- Maximum Design Pressure:** -45 psf. (See General Limitation #9.)

Membrane Type: SBS

Deck Type II: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood or wood plank

System Type B(4): Base layer of insulation mechanically fastened, top layer of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
ACFoam-II, ENRGY 3, Ultra-Max, ENRGY 3 Plus Minimum 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:1.3 ft ²
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density ft²</u>
High Density Wood Fiber Board Minimum ½" thick	N/A	N/A
Dens Deck Minimum ¼" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gal./sq.. Refer to Roofing Application Standard RAS117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Two or three plies of THERMglass IV or PolyTHERM Roofing Ply sheet adhered to insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at 30 to 35 lb/sq for each ply. (See specification number for appropriate number of plies).

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.



Surfacing:

(Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq.
2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively.

**Maximum Design
Pressure:**

-70 psf. (See General Limitation #9.)

Membrane Type: SBS

Deck Type II: Wood, Insulated

Deck Description: ¹⁹/₃₂" or greater plywood or wood plank

System Type B(5): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or adhesive.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density ft²</u>
ACFoam-II, ENRGY 3, Ultra-Max, ENRGY 3 Plus Minimum: 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:1.3 ft ²
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density ft²</u>
High Density Wood Fiber Board Minimum: ½" thick	N/A	N/A
DensDeck Minimum: ¼" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or 2.0 gallons per square for Fiberglas Roof Insulation. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Three or four plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb sheet adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.

Capsheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq. ft.



Surfacing:

(Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following: Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone.
2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 $\frac{1}{5}$ gal./sq. and 400 lbs./sq., respectively.

**Maximum Design
Pressure:**

-70 psf. (See General Limitation #9.)

Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank
System Type C(1): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board, High Density Wood Fiberboard Minimum 1" thick	N/A	N/A

Note: All layers shall be simultaneously attached; see top layer below for fasteners and density.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Perlite Insulation Board, High Density Wood Fiberboard Minimum 1" thick	1, 4	1:2 ft ²

Note: Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation panels listed are minimum sizes and dimensions; if larger panel are used the number of fasteners per board shall be increased maintaining the same fastener density (see Roofing Application Standard RAS 117 for fasteners details).

Base Sheet: (Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15%.

Ply Sheet: (Optional) Two plies of THERMglass Type IV or THERMglass Premium VI adhered to the insulated substrate with THERMastic 80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq. \pm 15%.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

Surfacing: Use one of the following surfacing.

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM D312 asphalt at an application rate of 60 lb./sq. \pm 15%.
2. A coat of Double Duty Aluminum at 1 gal./sq.

Maximum Design Pressure: -45 psf. (See General Limitation #7.)



Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank
System Type C(2): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, ENRGY 3, Ultra-Max Minimum: 1" thick	N/A	N/A
ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum: ½" thick	N/A	N/A
FescoBoard Minimum: ¾" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

<u>Insulation Top Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
AC-Foam I Minimum: 1.3" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3 Minimum: 1.4" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 9	1:3 ft ² 1:4 ft ²
ENRGY 3 Plus Minimum: 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 4, 5, 6, 8	1:4 ft ² 1:3 ft ²
Ultra-Max Minimum: 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2.9 ft ²
Perlite Insulation Board Minimum: ¾" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Refer to Roofing Application Standard RAS 117 for insulation attachment.



Base Sheet:	(Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.
Ply Sheet:	Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb sheet adhered in 3.5 gal./sq. \pm 15% of BURMastic Adhesive or POWERply Standard Cold Adhesive (See specification number for appropriate number of plies).
Cap Sheet:	POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq. ft.
Surfacing:	(Required if no cap sheet is used) Install one of the following: <ol style="list-style-type: none"> 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq. 2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively. 3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively.
Maximum Design Pressure:	-45 psf. (See General Limitation #9.)

Membrane Type: SBS
Deck Type II: Wood, Insulated
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank
System Type C(3): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
ACFoam-II, ENRGY 3, Ultra-Max Minimum: 1" thick	N/A	N/A
ENRGY 3 Plus Minimum: 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum: ½" thick	N/A	N/A
FescoBoard Minimum: ¾" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

<u>Insulation Top Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
ACFoam-I Minimum: 1.3" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:3 ft ²
ENRGY 3 Minimum: 1.4" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 9	1:3 ft ² 1:4 ft ²
ENRGY 3 Plus Minimum: 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12 4, 5, 6, 8	1:4 ft ² 1:3 ft ²
Ultra-Max Minimum: 1.5" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2.9 ft ²
Perlite Insulation Board Minimum: ¾" thick	1, 2, 3, 4, 5, 6, 7, 8, 9, 12	1:2 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Refer to Roofing Application Standard RAS 117 for insulation attachment.



Base Sheet: (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb sheet adhered in 3.5 gal./sq. \pm 15% of BURMastic Adhesive or POWERply Standard Cold Adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF

Capsheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR set in POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq. ft.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following: Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone
2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 $\frac{1}{5}$ gal./sq. and 400 lbs./sq., respectively.

Maximum Design Pressure: -45 psf. (See General Limitation #9.)



Membrane Type: SBS
Deck Type 1: Wood, Non-Insulated
Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank
System Type E: Base sheet mechanically fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Sheet: One ply of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28 lb mechanically fastened to the deck as detailed below: Base sheet shall be lapped 4" and fastened with approved roofing nails and tin caps 9" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.

Ply Sheet: None.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. \pm 15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM D312 asphalt at an application rate of 60 lb./sq. \pm 15%
2. A coat of Double Duty Aluminum at 1 gal./sq..

Maximum Design Pressure: -45 psf. (See General Limitation #7.)



WOOD DECK SYSTEM LIMITATIONS:

1. A slip-sheet is required with Ply IV and Ply VI when used as a mechanically fastened base or anchor sheet.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
- 10 All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE